| | Application No. | Applicant(s) |
|---|---|---|
| Notice of Allowability | Application No. | Applicant(s) |
| | 10/696,775 | FURUHASHI ET AL. |
| | Examiner | Art Unit |
| | Stephen W. Smoot | 2813 |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to applicant's RCE filed on 18 July 2006. | | |
| | | |
| 2. The allowed claim(s) is/are <u>8-15,17-19,21,23,25 and 26</u> . | | |
| 3. Acknowledgment is made of a claim for foreign priority una a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give | e been received. e been received in Application cuments have been received of this communication to file MENT of this application. eitted. Note the attached EXA es reason(s) why the oath of | on No In this national stage application from the ear reply complying with the requirements AMINER'S AMENDMENT or NOTICE OF |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. | | |
| (a) \square including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached | | |
| 1) hereto or 2) to Paper No./Mail Date | | |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of | | |
| Paper No./Mail Date | | |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). | | |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | |
| Attachment(s) | | • |
| 1. Notice of References Cited (PTO-892) | | formal Patent Application (PTO-152) |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | | ummary (PTO-413), /Mail Date |
| 3. Information Disclosure Statements (PTO-1449 or PTO/SB/C Paper No./Mail Date | D8), 7. ⊠ Examiner's | /Mail Date Amendment/Comment |
| 4. Examiner's Comment Regarding Requirement for Deposit | 8. 🗌 Examiner's | Statement of Reasons for Allowance |
| of Biological Material | 9. 🗌 Other | · |
| U.S. Patent and Trademark Office | Smoot | Stephen W. Smoot Patent Examiner Art Unit 2813 |

U.S. Patent and Trademark Office PTOL-37 (Rev. 7-05)

Notice of Allowability

Part of Paper No./Mail Date 20060825

Art Unit: 2813

This Office action is in response to applicant's RCE filed on 18 July 2006.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below to change the title to one

that indicates that the allowed claims exclude an insulation film of SiOCN and to cancel

the non-elected claims. Should the changes and/or additions be unacceptable to

applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure

consideration of such an amendment, it MUST be submitted no later than the payment

of the issue fee.

The application has been amended as follows:

In the Specification:

Change the Title of the Invention to

--Method for Fabricating a Semiconductor Device Including the Use of a

Compound Containing Silicon and Nitrogen to Form an Insulation Film of SiN or

SiCN--.

In the Claims:

Cancel claims 1-7, 20, 22, 24.

Art Unit: 2813

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's amendment filed on 18 July 2006 has been entered.

- 3. This application is in condition for allowance except for the presence of claims 1-7, 20, 22, 24 directed to species that are non-elected without traverse. Accordingly, claims 1-7, 20, 22, 24 have been cancelled.
- 4. Claims 8-15, 17-19, 21, 23, 25-26 are allowed.
- 5. The following is an examiner's statement of reasons for allowance:
 - Claims 8-15, 17-19, 21, 23, 25 are allowed because the prior art of record does not teach or suggest, in combination with the other claim limitations, a method for fabricating a semiconductor device that includes forming an insulation film of SiN or SiCN from a first raw material of a compound that contains at least silicon and nitrogen, a second raw material of a compound that contains plural nitrogen atoms in a molecule, wherein the molecule is not N₂, and ammonia as a third raw material; and

Art Unit: 2813

 Claim 26 is allowed because the prior art of record does not teach or suggest, in combination with the other claim limitations, a method for fabricating a semiconductor device that includes forming an insulation film of SiCN from a first raw material of a compound that contains at least silicon and nitrogen and a second raw material of a compound that contains plural nitrogen atoms in a molecule, wherein the molecule is not N₂.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen W. Smoot whose telephone number is 571-272-1698. The examiner can normally be reached on M-F (8:00 am to 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr. can be reached on 571-272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2813

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sws